

TABLE X. RETROSPECTIVE CASE STUDY FINALISTS

Location	Areas to be Investigated	Potential Outcomes	Selection Justification	Nomination Source(s)	Expected Reaction
Non Responsive					is/elected or all
					Non Responsive
Non Responsive					

Non Responsive

Non Responsive					
Marcellus Shale – Bradford and Susquehanna Counties (Dimock), PA	<ul style="list-style-type: none">• Ground water and drinking water well contamination• Suspected surface water contamination from a spill of fracturing fluids• Methane contamination of multiple drinking water wells	<ul style="list-style-type: none">• Determine source of contamination in drinking water well• Determine source of methane in private wells• Transferable results due to common types of impacts	<ul style="list-style-type: none">• Proximity of population and drinking water supplies• Magnitude of activity – very high density of production wells• Evidence of impaired water quality – documented cases of ground water impacts, impacts to private wells• Health and environmental concerns – reported illnesses• Knowledge gap that could be filled by a case study include issues of stray gas, aquifer degradation, surface water impacts from spills/leaks• Geographic and geologic diversity- Marcellus shale• Diversity of suspected impacts to	<ul style="list-style-type: none">• Public meeting (Canonsburg, PA and Binghamton, NY); Damascus Citizens Group; EPA region III	positive for communities, state, varies for elected officials

			<div>drinking water resources including stray gas, spills, pit leaks</div> <div><div><div>• Population at risk, potential for risk reduction</div><div>• Site status active-ongoing concerns, dissatisfaction with ongoing investigations</div><div>• Unique geological or hydrological features-rolling hills as opposed to flat lands of TX</div><div>• Characteristics of water resources – questions regarding extent of aquifer degradation/future use</div><div>• Multiple nominations from diverse stakeholders</div><div>• Land-use - suburban, rural</div></div></div>		
<div>Non Responsive</div>					<div>as Animas</div> <div>ates/elected</div> <div>e for all</div>

Non Responsive					
Marcellus Shale – Washington County, PA	<ul style="list-style-type: none">• Changes in water quality in drinking water, suspected contamination• Stray gas in wells, spills	<ul style="list-style-type: none">• Determine extent of impact to surface and ground water from surface spill• Investigate source of contaminants in drinking water	<ul style="list-style-type: none">• Proximity of population and drinking water supplies – private wells and surface waters• Magnitude of activity – high density of activity/production wells• Evidence of impaired water quality in private wells, impacts to surface water• Health and environmental concerns of general nature• Knowledge gap that could be filled by a case study include stray gas, spills• Geographic and geologic diversity- Marcellus shale• Diversity of suspected impacts to drinking water resources including stray, spills• Population at risk, potential for risk reduction• Site status – ongoing active concerns, dissatisfaction with ongoing investigations• Unique geological or hydrological features-Marcellus shale• Characteristics of water resources – concerns with reduced water quality in private wells, impacts to surface waters• Multiple nominations from stakeholders• Land-use (rural, agricultural)	<ul style="list-style-type: none">• Public meeting (Canonsburg, PA), EPA Region III, Damascus Citizens group	<ul style="list-style-type: none">• positive for communities, state, varies for elected officials

Prospective case studies where EPA will monitor key aspects of the hydraulic fracturing process at future hydraulic fracturing sites:

- Non Responsive
- Marcellus Shale - Washington County, PA (DOE and Range Resources)- expected reactions : positive for communities and state, varies for elected officials

Non Responsive